

IN THE CLAIMS

Please amend the claims as follows:

1. (currently amended) An optical disk drive, comprising:  
a housing (1);  
a drive motor (2) and a drive shaft (3) mounted within the housing and adapted to engage the disk (D) for rotating it,  
an optical pick-up unit (5), including a fixed part (7) comprising at least a light source, and a movable part (8) with sliding mounted possibility on a guide (9) and comprising at least a mirror (13), a focusing lens (14), and lens-moving elements, said movable part being adapted to move a focused beam along the disk (D),

a PCB (17) having a signal connection to the lens-moving elements on the movable part (8) of the pick-up unit through flexible wires (20),  
~~characterized in that~~

~~only one the same~~ PCB (17) ~~is provided which~~ serves as a mounting base for the fixed part (7) of the optical pick-up unit (5), the guide (9), and the drive motor (2),

and wherein the PCB is contained within the housing.

2. (original) The optical disk drive as claimed in claim 1, wherein the PCB (17) accommodates electronic components (18) which are mounted to the PCB (17) on a side thereof facing an adjacent housing wall.

3. (currently amended) The optical disk drive as claimed in claim 1, wherein the optical disk drive includes a heat conducting mounting means in addition to the PCB and the PCB (17) is mounted

to the housing through the heat-conducting mounting means, such as a heat-conducting mat (19).

4. (currently amended) An The optical disk drive as claimed in claim 1, comprising:

a housing (1);  
a drive motor (2) and a drive shaft (3) mounted within the housing and adapted to engage the disk (D) for rotating it,  
an optical pick-up unit (5), including a fixed part (7) comprising at least a light source, and a movable part (8) with sliding mounted possibility on a guide (9) and comprising at least a mirror (13), a focusing lens (14), and lens-moving elements, said movable part being adapted to move a focused beam along the disk (D),

a PCB (17) having a signal connection to the lens-moving elements on the movable part (8) of the pick-up unit through flexible wires (20),

and wherein the same PCB (17) serves as a mounting base for the fixed part (7) of the optical pick-up unit (5), the guide (9), and the drive motor (2)

and wherein the flexible wires are contained within a wire flex (20) which is bent bendable about one bending axis only, said bending axis being substantially parallel to the shaft (3) of the drive motor (2), the wire flex bending about the bending axis during operation.

5. (currently amended) The optical disk drive as claimed in claim 1, wherein the linear guide (9) for the movable part (8) of the optical pick-up unit (5) is mounted directly on the PCB (17).

6. (currently amended) The optical disk drive as claimed in claim 1, wherein the housing (1) is made of metal.

7. (currently amended) The optical disk drive as claimed in claim 1, wherein the movable part (8) of the pick-up unit (5) comprises an actuator having driving coils for the focusing lens, said driving coils being connected to the PCB through said flexible wires (2).

8. (currently amended) A method of assembling an optical disk drive, comprising the steps of:

providing a housing (1), a drive motor (2), and a drive shaft (3) to be mounted within the housing and adapted to engage the disk (D) for rotating it, an optical pick-up unit (5), comprising a light source, at least a mirror (13) and a focusing lens (14) to create a focused beam, a guide (9) for moving the focused beam along the disk, and a PCB (17) having main electrical components (18) and being connected to the guide (9) through flexible wires (20),

characterized in that

first the main electrical components (18) are mounted on one side of the PCB (17), and then the guide (9), the pick-up unit (5), and the drive motor (2) are mounted on the opposite side of the PCB (17).

9. (original) The method as claimed in claim 8, wherein the parts (2, 5, 9) and electrical components (18) are fixed to the PCB (17) in one soldering step.

10. (new) The optical disk drive of claim 3, wherein the heat-conducting mounting means is a heat-conducting mat.

11. (new) The optical disk drive as claimed in claim 1, wherein the optical disk drive includes a heat conducting mounting means in addition to the PCB and the heat conducting mounting means extends between the PCB (17) and the adjacent wall of the housing.

12. (new) The optical disk drive as claimed in claim 1, wherein the fixed part of the optical pick-up unit, the guide, and the drive motor are directly mounted on the PCB by soldering.

13. (new) The optical disk drive as claimed in claim 8, wherein the fixed part of the optical pick-up unit, the guide, and the drive motor are directly mounted on the PCB by soldering.